

### REMARKS

Claim 1 stands rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,590,943 to Ali. The cellular transceiver of claim 1 comprises a first digital decimation filter with N bands and a second digital decimation filter to reject N-1 bands. The second digital decimation filter is coupled to the first digital decimation filter for implementing a Global System for Mobile (GSM) communication mode.

The Ali reference fails to teach a first digital decimation filter with N bands and a second digital decimation filter that rejects N-1 bands, as noted by the Examiner in the Office Action. The two decimation stages taught by the Ali reference simply decimate the outputs to a desired frequency or bit rate. In other words, all that the Ali reference teaches is that two decimation filters output signals at different bit rates. There is no requirement in the Ali reference that the first digital decimation filter with N bands should have a specific relationship in terms of bands with the second digital decimation filter that rejects N-1 bands.

The conventional decimation operation taught by the Ali reference is not the same as allowing certain bands to pass and rejecting one less band. There is no relationship in terms of bands between the two bit rates of the two decimation stages taught by the Ali reference. Therefore, a *prima facie* obviousness case is not made out since the Ali reference does not render claim 1 limitations obvious to one of an ordinary skill in the pertinent art.

Claims 1 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the U.S. Patent No. 6,295,461 to Palmer, et al. (hereinafter, "Palmer"). The Palmer reference teaches two filters, one for reception of wide band signals and the other one for narrow band signals. The second filter 26 does not implement a GSM mode, as claimed in claim 1. Neither is there a relationship in terms of bands between the two filters taught by the Palmer reference. That is, the first filter with N bands and the second filter to reject N-1 bands is not taught or suggested by the Palmer reference.

The Examiner argues that as a design choice the second filter can be implementing the GSM communication mode since it teaches implementation of narrow band mode. However, a rejection supported by nothing more than the unsupported argument that the claimed invention is a design choice fails to make out a *prima facie* rejection. Therefore, the Examiner is respectfully requested to cite a specific teaching or suggestion where the Palmer reference teaches

implementation of a GSM communication mode by a digital decimation filter which rejects N-1 bands.

Claims 1, 11, 16, 18, 20, and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,617,060 to Wilson, et al. (hereinafter, "Wilson"). Again, the Wilson reference is cited to teach first filter for reception of a wide band CDMA signal and a second filter for reception of a FM signal. The Examiner notes that the filter 53 for reception of the FM signal does not implement a GSM communication mode. The implementation for the GSM communication mode in place of the FM mode is again characterized as a "mere design choice." However, such an unsupported, conclusory rejection under 35 U.S.C. § 103(a) fails to make out a *prima facie* rejection. It is respectfully submitted that the Examiner cite a specific teaching or suggestion for the implementation of a GSM communication mode by a digital decimation filter which rejects N-1 bands.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the Ali reference further in view of U.S. Patent No. 6,480,477 to Treadaway, et al. (hereinafter, "Treadaway"). In the transceiver of claim 2, the first digital decimation filter selectively implements a digital square-root-raised-cosine filter for a Wide Band Code Division Multiple Access (W-CDMA) mode.

The Examiner admits that the Ali reference does not teach such filter. However, the Examiner cites the Treadaway reference teaching a matched filter square-root-raised-cosine for minimizing inter-symbol interference. But no motivation is provided in the Treadaway reference to include the matched square-root-raised-cosine filter into the Ali reference, especially when the Ali reference simply teaches a digital radio receiver with improved quantisation noise reduction. In other words, the Ali reference does not address the problem which deals with the external inter-symbol interference, rather internally within the filter stage improves quantisation noise reduction. Therefore, the claim 1 limitations are not rendered obvious to one of ordinary skill in the relevant art.


Claims 2, 4, and 6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the Palmer reference further in view of the Treadaway reference. Based on the similar reasons set forth in the context of above rejection over the Ali and the Treadaway references, claim 2 is

patentably distinguishable over the combination of the Palmer and Treadaway references. For the similar reasons, rejection of claims 4 and 6 under 35 U.S.C. § 103(a) over the Wilson and Treadaway references is traversed.

In view of these amendments and remarks, the Application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any over payment to Deposit Account 20-1504 (ITL.0324US).

Respectfully submitted,

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